



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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AD HOC ADVISORY COMMITTEE MEETING SUMMARY

Aquaculture Enhancement Areas

May 22, 2008

Welcome and Introductions

Advisory Committee Members Present:

Agriculture/Farming: Jane Corson-Lassiter, David Hickman, Butch Nottingham

Aquaculture Industry: Mike Peirson, Mandi Killmon (for John West), Robert Bloxum, Jr., Ed Tankard

Development/Real Estate: Ace Seybolt

Environmental: Chris Moore (Chesapeake Bay Foundation), John Chubb (Citizens for a Better Eastern Shore)

General Interests: Rusty Gowen

Localities and Towns: Terry Long, Elaine Meil, Robert Ritter

Staff Present to Assist TAC:

VA Department of Environmental Quality (DEQ): Ellen Gilinsky, Alan Pollock, Jim McConathy, Elleanore Daub, Vijay Satyal, Jackie Rickards

VA Department of Health (VDH): Robert Croonenberghs (Shellfish Sanitation)

VA Department of Conservation and Recreation (DCR): Noah Hill

VA Marine Resources Commission: Jim Wesson

At the end of the last meeting staff had promised the committee that we would present draft language for the group to review. It was believed that knowing the impacts of the regulation would help the group decide upon how extensive the aquaculture enhancement areas were to be.

Review of 2 Draft Options

These drafts vary primarily in their timing to section 270 (Shellfish buffer zones; public hearing) and whether section 270 has been decided (public hearing and permit denied or permit allowed to be processed). The new amendments would be in a new section of the regulation (section 275). The purpose of the new section 275 is not to result in outright disapproval of a surface water discharge, rather to explore waste water management alternatives first.

Draft 1 - Alternatives analysis done first and before section 270 is initiated

Draft 1 of new section 275 requires a wastewater management alternatives analysis as part of a permit application for any VPDES discharge that would result in a condemnation (generally speaking these are sewage discharges but could include animal meat processing) and section 270 has not been initiated. The analysis would include the feasibility, the environmental, social and

economic impacts to beneficial uses and to the locality and its citizens resulting from each management alternative, and opportunities to mitigate any adverse impacts.

If the analysis shows a different alternative from a VPDES discharge is feasible, has less of an environmental impact than the VPDES discharge and has no significant social and economic impacts, then the VPDES application is considered incomplete while the applicant pursues the necessary permit for the 'better' alternative through the appropriate regulatory authority (septic would be through the VDH, land application would be a VPA permit through the DEQ). If the alternative is disapproved by the appropriate regulatory authority, then the VPDES application may be pursued. The negative aspect of this approach is that the Board may deny the VPDES application anyway under section 270 (because 270 has not yet been decided in this scenario).

Single family homes VPDES discharges are exempt from section 275 requirements but would still be subject to the public hearing requirements and potential denial under section 270.

Discussion: There were questions as to how section 270 condemnations and shellfish resources were determined. Condemnation size is determined using a model that assumes a plant upset could occur. They also take into account the type of disinfection (UV kills viruses better than chlorine) and stream hydrology, among other things. A permit can be denied per section 270 if there is a condemnation and a violation of the general standard. Generally speaking this means, if there is a condemnation of an existing shellfish resource, it will be denied. The resource includes commercial and recreational shellfish and there is no threshold or quantitative measure to assist in making that decision. Information regarding the presence or absence of a resource can be submitted at a public hearing. There was concern about the used of 'shellfish beds' rather 'shellfish waters' and that 'shellfish waters' may be more appropriate for draft #1 since all sewage dischargers would result in a condemnation of waters. DEQ will check into that but want to be sure the wording matches exactly to 270.

DEQ staff indicated that if the alternatives analysis showed that the socio-economic impact was too great for certain alternatives, they would support the results of the analysis and make the appropriate recommendation to the Board.

Draft 2 –Alternatives analysis done after 270 has been decided by State Water Control Board (permit allowed to continue application process)

Draft 2 of new section 275 requires a wastewater management alternatives analysis if the decision of the Board under section 270 is that the VPDES permit process may continue (there is no existing shellfish resource). Then new section 275 applies and requires a waste water management alternatives analysis before the VPDES discharge permit can be issued. If the decision of Section 270 was to deny the permit, then section 275 has no requirements for the applicant although they may find themselves forced to look into another alternative. Draft 2 gets to the point of protecting 'potential' shellfish resource waters because per section 270 existing shellfish resource waters would likely result in a denial of the VPDES discharge permit. The analysis would include the feasibility, the environmental, social and economic impacts to beneficial uses and to the locality and its citizens resulting from each management alternative, and opportunities to mitigate any adverse impacts.

If the analysis shows a different alternative from a VPDES discharge is better, then the application is considered incomplete while the applicant pursues the necessary permit for the different

alternative through the appropriate regulatory authority (septic would be through the VDH, land application would be a VPA permit through the DEQ). If the alternative is disapproved by the appropriate regulatory authority, then the VPDES application may be pursued. There is never a guarantee that a VPDES application will be issued (there may be a technical objection or public comment may alter the course of issuance).

Discussion: It was noted that as a practical matter, most waters will fail 270 and VPDES will get denied. There was discussion about the cost (both monetary and time) of implementing 270 vs. 275. It appears that implementation of 270 is more of a time cost, but the requirement of an engineering alternatives analysis under 275 could be expensive. There were ongoing discussions and concerns about the cost of the analysis and how it related to a preliminary engineering report (PER). It was clarified that existing dischargers won't have to do the analysis unless the discharge expanded and resulted in a larger condemnation. Draft 2 also allows for the alternatives analysis to be done earlier if a discharger doesn't want to wait for a 270 decision.

It was noted that Draft 2 would result in a better analysis of the surface water discharge since the applicant has passed section 270.

Comparison of Drafts 1 and 2

Drafts 1 and 2 both apply to new or expanded sewage discharges AND industrials that may cause a condemnation (like a meat processor or an industry with sewage mixed in with industrial waste). The difference between the two is in timing of the submittal of analysis. Draft 1 alternative analysis must be submitted with all these new or expanded sewage discharge VPDES applications, Draft 2 only with those that pass the test of 270 and were not denied by the Board. Draft 2 would affect a smaller population of applicants.

Draft 1 and 2 both include an alternatives analysis of waste water management alternatives. The feasibility, environmental impact and socio-economic impact are studied. If the analysis shows that the VPDES discharge is feasible, has the least environmental impact and no significant socio-economic impact, then it may move forward. Since the draft 1 procedure is submitted prior to a decision under section 270, there is a chance under 270 that the VPDES application will still get denied. Since the draft 2 procedure applicants have already 'passed the test' of 270 and if they are the best alternative per the analysis, the VPDES application may be processed.

If an alternative to a VPDES discharge is deemed feasible, has less of an environmental impact and no significant socio-economic impact, drafts 1 and 2 both deem the VPDES application incomplete while applicant pursues alternative which may or may not be approved by appropriate authority. Under draft one if the authority approves the alternative, then that alternative will be pursued. If the approving authority rejects the alternative application, the procedure defaults back to processing the VPDES application which still must go through 270 and might get denied. If the permit is not denied under 270 the application may proceed. Under draft 2 if approval authority rejects the application for the alternative wastewater management option, then VPDES is allowed to be processed.

Discussion: Storm water would not be considered an issue under 270 because it would not prompt a condemnation. Tomato waste even with a 'natural' bacteria load would not be considered for condemnation. There were questions about the list of VPDES discharges on the Eastern Shore and

which ones caused condemnations and which ones were no-discharge type permits (VPA rather than VPDES). DEQ staff will clarify via email.

There were concerns that developers would automatically apply for the single family home general permit since it is exempted from the procedure and these treatment facilities can cause condemnations in the future if not properly maintained. It was noted that only a few single family home general permits have been issued on the Eastern Shore and are only issued when traditional systems (septic) won't work. Also single family home permits are limited by distance and cannot be issued if they are in close proximity. Also, section 270 still applies to the single family home permit and can get denied under that requirement.

It was believed that more inspections of septic systems was occurring now to ensure proper maintenance so there is hope that that will cause fewer water quality problems in the future.

Most of the committee was in favor of Draft 2. Draft 1 seemed like overregulation and there was always a chance of denial under 270 even if the VPDES application was deemed best and that didn't make sense. Although draft 2 allows for the analysis to be done later and the length of time to get through 270 may be an issue, there was nothing about draft 2 that prevents dischargers from doing the analysis up front. Currently, applicants are encouraged to look at alternatives first under the existing rules.

From this point forward, the group considered the information presented as if Draft 2 were the option preferred.

Alternative Analysis

A draft procedure for the alternative analysis was presented. This information would be contained in a guidance document. DEQ staff wanted to allow a phased approach to the analysis so that infeasible waste water management options did not have to go through the entire socio-economic study to save time and money on the part of the applicant. Environmental impacts would be included as part of the phase 1 analysis. Phase 2 of the analysis would study the impact of the project, the impact to the locality and citizens, the impact on beneficial uses and costs of mitigation. Cost would be considered in phase 2 of the analysis. All impacts will be weighed, both positive and negative.

Discussion: There remains concern that this is a PER and that is costly. Staff responded that we would not expect engineering drawings or design in the feasibility study. Certain items to demonstrate feasibility may be needed (like soil characteristics). A full PER would include more of the impact assessment items of phase 2 of the analysis. The phase 1 decision would be made by staff and staff would work with the permittee to determine the most feasible options to pursue.

The alternative analysis's socio-economic impact component would also account for economic value associated with the provision of proffer cash / expenses incurred by the developer to support resource maintenance or public resources provision in and around the proposed development, keeping into consideration existing zoning conditions/requirements.

Tax revenue calculations will be done using an expected occupancy projected forward in time. There were concerns with timing and the DEQ response on the feasibility part of the study could

stop a project. DEQ agreed to put goals for response in the guidance. DEQ staff agreed to look into adding the phased approach allowance to the regulation rather than just in guidance.

The obvious impact is from a shellfish closure. Does newer technology or additional disinfection (chlorine plus UV) help to reduce the size of the condemnation? UV disinfection might reduce the condemnation size, but chlorine plus UV would not. The condemnation is really necessary because human error can always occur and a spill can occur regardless of the type of disinfection and FDA requires it.

The alternative of choice is likely to be land application but rezoning, especially in Northampton County, is very strict on this. Zoning may be part of the feasibility phase. If not properly zoned, it may not be a feasible option. The phased approach will be included during the comment period for the public to see and provide comment.

Benefits from the future growth of aquaculture should be included as it is growing fast. There were concerns the developer will give a lower value to aquaculture. All applicants will be given the guidance to follow with resources for information like this, so this should not occur. Also, the analysis will be reviewed by DEQ staff so those types of errors will be found and corrected.

It was agreed that habitat restoration (due to filter feeding of shellfish) can occur even in a condemned area but there is not good data to reference for this benefit.

Aquaculture Enhancement Areas

The group was asked if the entire Eastern Shore could be included as aquaculture enhancement areas since the group has tentatively agreed on draft 2 and that draft only affects a small population of applicants.

Discussion:

Many of the committee members thought this process should be applied to applications for a proposed discharge to any of the tidal waters of the Eastern Shore. However, several committee members favored having this approach apply only to proposed discharges to selected waters of the Eastern Shore (i.e. to exclude the more densely populated towns), but they were also concerned that establishing specific zones for aquaculture protection might lead to unintended future regulatory actions. There was concern about excluding the towns because water quality in those areas can and should improve.

Several area options were considered, including all Eastern Shore waters, all waters outside of administrative closure areas, inside administrative closure areas, any type of condemnation area, letting the locality decide upon areas, allowing exceptions or exemptions, the seaside, the bay side, excluding the towns and other combinations. Staff is concerned that EPA may consider this a new designated use and not allow DEQ to remove areas from listing without more study. We cannot allow a third party to dictate a future requirement of a regulation (i.e. let the locality decide). Each deletion or addition of waters would have to go through a rulemaking. Fortunately, DEQ is required by law to update the regulation at least once every three years.

The applicant really just wants to know exactly what the rules are.

There is a concern that all applicants will attempt to use septic system because that doesn't get subject to 270 OR 275.

Except perhaps the headwaters of creeks, all waters on the Eastern Shore are going to have a 'shellfish resource' and likely denied under section 270 so alternatives will be pursued by applicants regardless and the section 275 alternatives analysis requirements will not be initiated. Therefore, this new section will not cause the huge burden they are anticipating. Localities look at alternatives anyway. The new section does not deny permits, it is just a process. After the 2010 upgrades, there will be no more expansions or upgrades for a long while. Chincoteague is really the only town that might be subject to the section 275 requirements if they are allowed to pursue a VPDES under section 270.

Chincoteague was discussed as an example of a town needing surface discharge because of the lack of feasible alternatives. Some thought that could be shown in phase 1 of the analysis so the inclusion of Chincoteague waters doesn't mean these new requirements under 275 are denying the ability to have a surface discharge or requiring an extensive alternatives analysis.

A good planning tool would be to ask the clam industry or look at the suitability maps that show where the good clamming waters are and choose only those waters. Choose waters you need to protect and choose waters that are for disposal.

There remained concerns about the impact of doing an alternative analysis on the towns (staff estimate was (\$60 – \$100K), that the towns needed areas to discharge and concerns about specifically relating the regulation to the aquaculture industry or applying the requirements to a surface water area or zone (just apply it to new or expanded discharges).

There remained concerns about the economic impact of certain technologies and how the Board would consider that in making decisions.

There remained concerns about exempting areas since alternatives and advancing technologies should be pursued to clean up all waters. Also, exempting areas may place an unfair advantage or disadvantage in those areas.

The group was asked to contact Elleanore Daub with additional comments and revised language would be emailed shortly.

Future Meetings: A future meeting will not likely be necessary but the group can decide after they see the revised regulation.

Handouts distributed at the May meeting:

Agenda

April Meeting Summary

Draft 1 and 2

Comparison of Drafts 1 and 2 for 9 VAC 25-260-275

Procedure for an Analysis of Wastewater Management Alternatives (Draft)

Example Scenario of Conducting a Socio-Economic Analysis for Spray Irrigation vs. VPDES Discharge

Options for Aquaculture Enhancement Areas

9 VAC 25-260-270. Shellfish buffer zones; public hearing